

MARKED UP COPY OF AMENDED CLAIMS

25. (Fourth Amendment) A polypeptide encoded by a nucleic acid construct comprising the following nucleic acid sequences in the following order:

- a) at least one promoter element operably linked to;
- b) at least one nucleic acid sequence which encodes an active compound, wherein said active compound is endogenous to mammals, operably linked to;
- c) at least one nucleic acid sequence which encodes an amino acid sequence cleavable specifically by a protease which is released at or from a mammalian target cell, operably linked to;
- d) at least one DNA sequence which encodes a polypeptide which is bound to said active compound by said cleavable amino acid sequence and inhibits the activity of said compound **while bound thereto by said cleavable amino acid sequence**,

wherein said polypeptide comprises the active compound or compounds of b), the cleavable sequence or sequences of c), and the inhibitor or inhibitors of d), and wherein said nucleic acid component c) does not naturally occur as operably linking said nucleic acid sequence b) to said nucleic acid d) **and wherein the nucleic acid sequence b)c)d) encodes an inactive precursor of the protein active compound b)**.

28. (New) A polypeptide according to claim 25, wherein the active compound is a polypeptide selected from the group consisting of thrombin, factor Va, factor VIIa, factor IXa, factor Xa, TF coagulation-active fragments, factor XIIa, a thrombin which is mutated in the region of the Arg-Thr cleavage site (amino acid position 327/328), urokinase, tPA or functional bybrids thereof, Cvf, C3b or functional cleavage products thereof, of protein C, C-1S inhibitor, α 1-antitrypsin, hirudin, AT-II, TFPI, PAI-1, PAI-2, PAI-3, oncostatin M, L1F, angiostatin, platelet factor 4, TIMP 1, TIMP2, TIMP 3, and kallikrein.

29. (New) A polypeptide encoded by a nucleic acid construct comprising the following nucleic acid sequences in the following order:

- a) at least one promoter element comprising the promoter sequence of the cdc25C gene, the sequence GCCACC, and the cDNA for an immunoglobulin signal peptide operably linked to;

Serial No. 09/256,237

- b) at least one nucleic acid sequence which encodes human factor X, in which amino acid 194 has been mutated from Arg to Tyr (mutated FX), operably linked to;
 - c) at least one nucleic acid sequence which encodes an amino acid sequence cleavable specifically by a protease which is released at or from a mammalian target cell, operably linked to;
 - d) at least one DNA sequence which encodes a polypeptide which is bound to said mutated FX by said cleavable amino acid sequence and inhibits the activity of said compound while bound thereto by said cleavable amino acid sequence,
- wherein said polypeptide comprises the mutated FX of b), the cleavable sequence or sequences of c), and the inhibitor or inhibitors of d), and wherein said nucleic acid component c) does not naturally occur as operably linking said nucleic acid sequence b) to said nucleic acid d) and wherein the nucleic acid sequence b)c)d) encodes an inactive precursor of the mutated FX, compound b).